

Section A

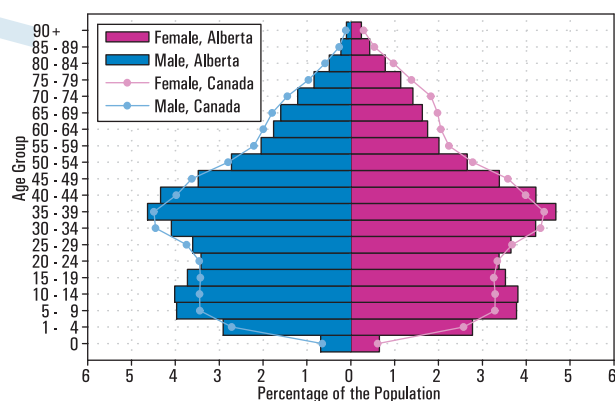
demographics

A.1 Population

The Alberta Health Care Insurance Plan Stakeholder Registry File contains records for almost all individuals residing in the Province of Alberta. As a result, counts of registrants at particular points in time can function as a source for estimates of Alberta's population. (A small number of individuals, including military personnel whose health care costs are paid by the federal government, are excluded from this database.) The population of Alberta was approximately 2,791,000 in 1997.

The age distribution of Alberta's population differs slightly from the age distribution of Canada's population. Since Alberta has smaller proportions of older persons, the average age of Albertans is lower than the average age of Canadians residing outside Alberta.

Figure A.1.1
Population Distribution, Alberta and Canada, 1997

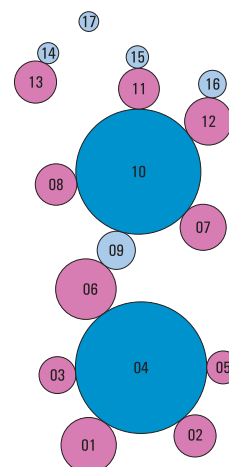


Source: AHCIP Stakeholder Registry, 1998
Statistics Canada, 1998

The populations of Alberta's regional health authorities differ dramatically as shown in the stylized map. Here, each geographic region has been redrawn with an area proportional to its 1997 population. A comparison of this cartogram with a standard map shows that many of the largest areas in Alberta are very sparsely populated.

Figure A.1.2
Population Cartogram, Alberta Health Regions, 1997

RHA	Population in 000s	Region Name
17	18.8	Northwestern
16	38.4	Northern Lights
15	25.3	Keeweenaw Lakes
14	20.0	Peace
13	86.2	Mistahia
12	106.2	Lakeland
11	80.9	Aspen
10	791.8	Capital
9	38.9	Crossroads
8	87.8	Westview
7	102.7	East Central
6	180.2	David Thompson
5	51.6	Health Region 5
4	860.6	Calgary
3	69.2	Headwaters
2	86.7	Palliser
1	145.7	Chinook

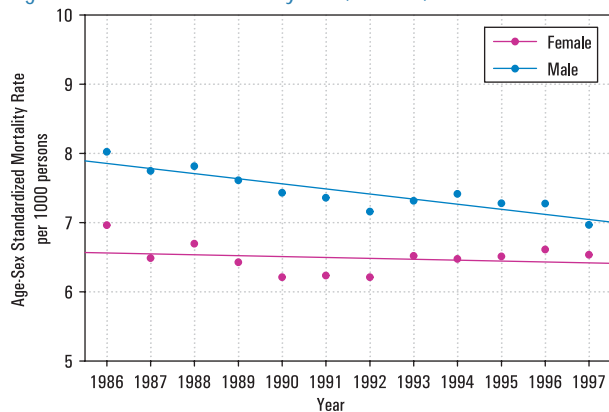


Source: AHCIP Stakeholder Registry, 1998

A.2 Mortality

The age-sex standardized mortality rate is a measure of the number of individuals per 1,000 population who die in a single year (if the population distribution by age were the same for Alberta as for Canada as a whole). Mortality rates have been decreasing in Alberta over the past decade, though this is much more apparent for males than for females.

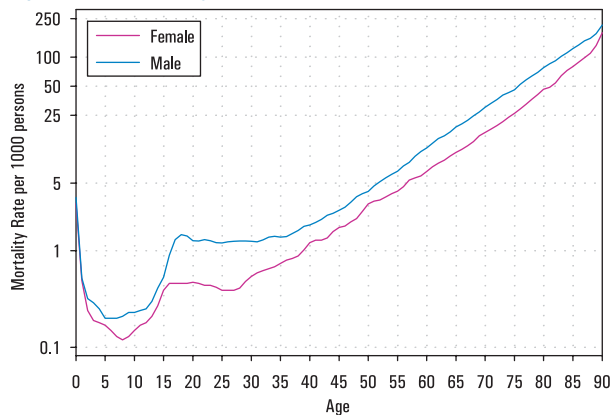
Figure A.2.1
Age-Sex Standardized Mortality Rate, Alberta, 1986 - 1997



Source: Vital Statistics Death File, 1998

The age-specific mortality rates show low rates in childhood, a rapid increase in the teenage years, a plateau during the young adult years, and a consistent increase thereafter with age. Females have lower age-specific mortality rates at all ages.

Figure A.2.2
Age-Specific Mortality Rates Alberta, 1992 - 1996 combined



Source: Vital Statistics Death File, 1998

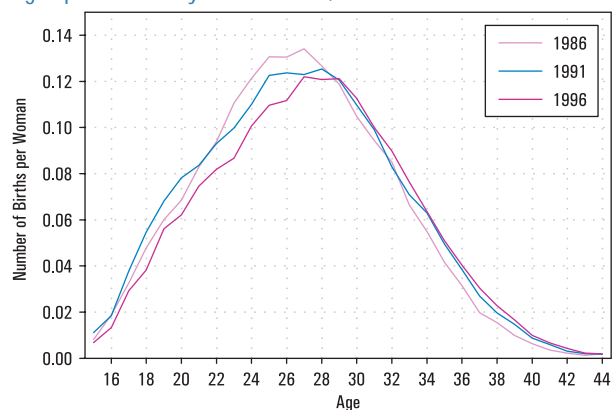
Mortality rates are often transformed and presented as life expectancies. Section C (Health Status and Determinants) of this document presents information on life expectancy. For a detailed consideration of death rates due to specific causes, see Section D (Chronic Disease and Injury).

A.3 Fertility

The age-specific fertility rate for a given period (usually one year) is the total number of live births to mothers in a specific age group, divided by the total female population in that age group. The curve formed by plotting age-specific fertility rates across all childbearing ages is considered a good descriptor of patterns of fertility within a population. Between 1986 and 1996, the fertility curve has shifted downwards, indicating decreased fertility, and to the right, indicating an increase in the mean age of fertility. From 1986 to 1996, the mean age of fertility increased from 27.2 to 27.9 years of age in Alberta.

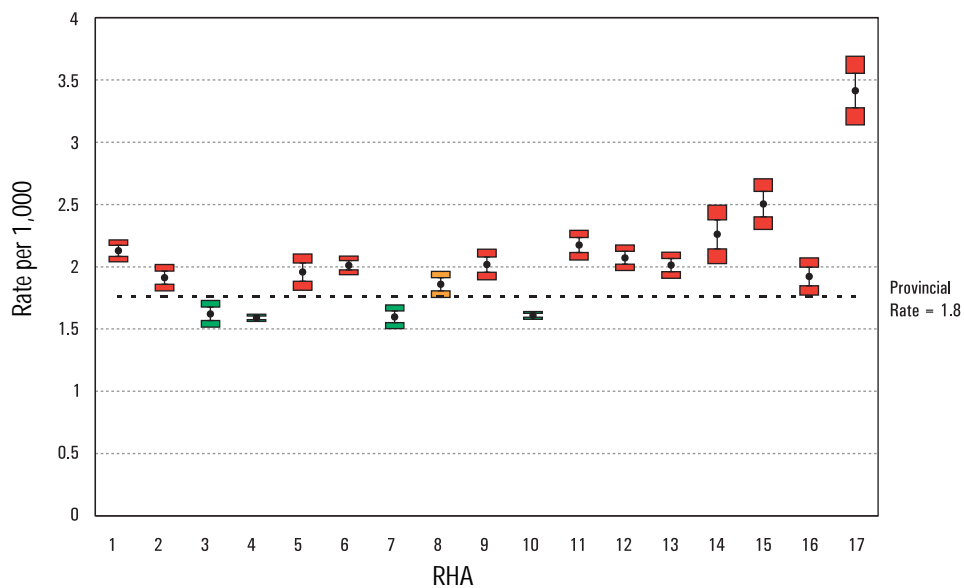
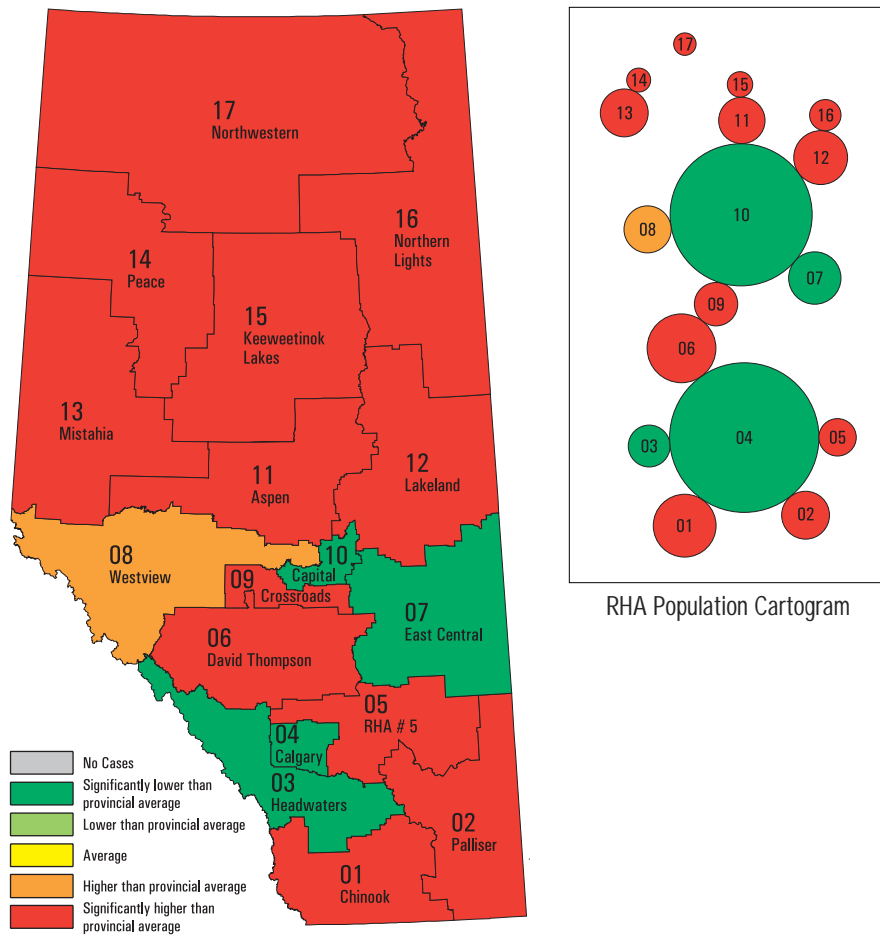
The total fertility rate (TFR) is the sum of age-specific fertility rates and is interpreted as the average number of children that would be born to each female in the population if the age-specific fertility rates did not change. The total fertility rate for Alberta was already low in 1986 and under the level of 2.1 needed to maintain a stable population size. Although there have been some fluctuations from year to year, the TFR decreased only slightly from 1.82 births per woman in 1986 to 1.76 births per woman in 1996. There is considerable variability in the TFR by region, with higher rates generally associated with northern and rural regions.

Figure A.3.1
Age-Specific Fertility Rates Alberta, 1986 - 1996



Source: Vital Statistics Birth File, 1997

Figure A.3.2
Total Fertility Rate by Region, Alberta, 1996

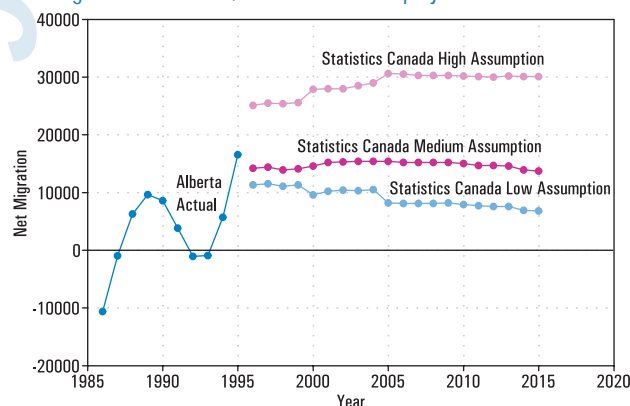


Source: Vital Statistics Birth File, 1997

A.4 Migration

Migration patterns are difficult to predict because they are often strongly influenced by short-term economic considerations. In the recent past, Alberta has shown a strong increase in net migration. Since the Alberta economy continues to perform strongly, Alberta Health and Wellness has based its population projections on the high migration scenario developed by Statistics Canada. Preliminary indications are that these projections have been accurate for 1997 and 1998.

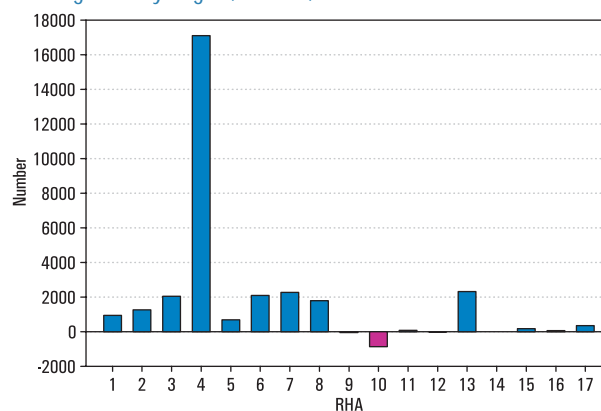
Figure A.4.1
Net Migration to Alberta, 1986 - 1996 and projected



Source: AHCIP Stakeholder Registry, 1998
Statistics Canada, 1998

There are also differences in migration patterns between regions. For 1996, Calgary and the southern regions showed a large net influx while the Capital region and the north had a small net outflow (except for the Mistahia region). Preliminary data for 1997 and 1998 suggest that high levels of migration into Calgary continued, but that the Capital region also experienced a net influx of migrants. Oil sands development is also expected to lead to an influx to the Northern Lights region.

Figure A.4.2
Net Migration by Region, Alberta, 1995 - 1996



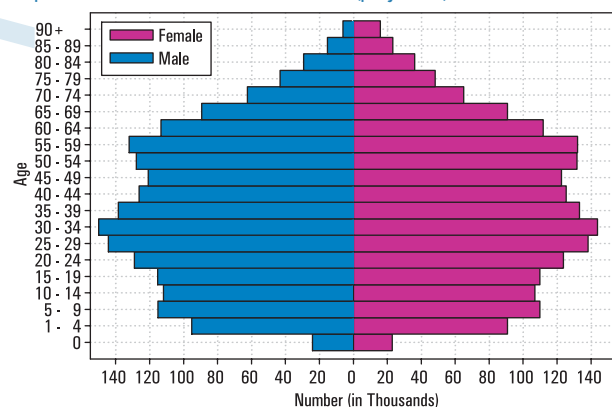
Source: Health Surveillance, 1998

A.5 Projected Population Change

In the most widely used method for developing population projections, separate projections are developed for mortality, fertility and migration, the three major components of population growth. These projections are then combined according to a statistical model. Alberta Health and Wellness' population projections are available in detail from reports entitled *Population Projections for Alberta and its Health Regions: 1996-2016*, *Population Projections for Alberta and its Health Regions: Models and Methods*, and *Population Projections for Alberta and its Health Regions: Update 1998*.

According to these projections, Alberta's population structure will change substantially over the next two decades as the 'baby boom' generation ages. There is also an indication that a second, or 'echo boom' will have reached adulthood by 2016.

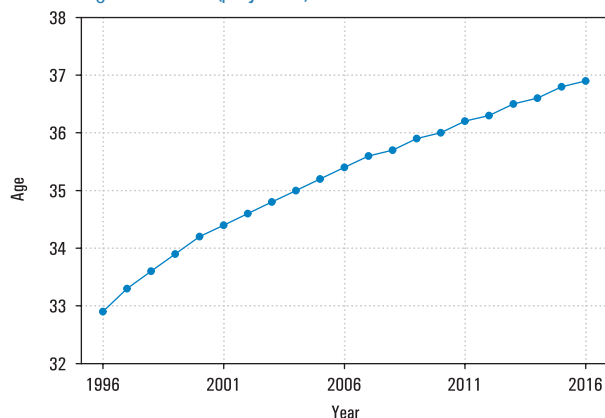
Figure A.5.1
Population Distribution Alberta, 2016 (projected)



Source: Health Surveillance, 1998

This age structure is reflected in part by a projected increase in the median age of Albertans over the next two decades.

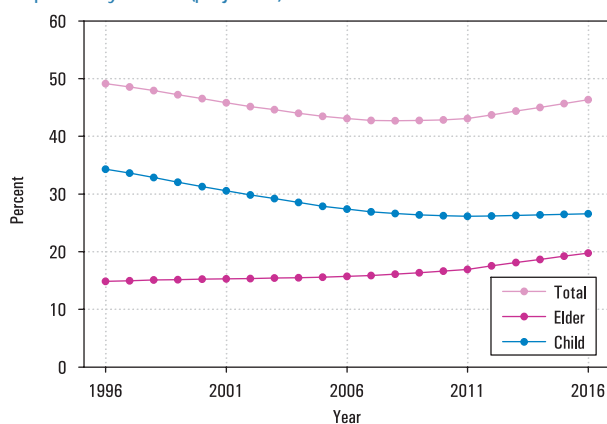
Figure A.5.2
Median Age in Alberta (projected)



Source: Health Surveillance, 1998

The proportion of older Albertans (65+) will increase and the proportion of younger Albertans (0-15) will decrease in the next millennium. The combined percentage of old and young will decrease for approximately a decade, primarily as a result of decreased fertility, before it begins to rise as the 'baby boom' generation enters old age.

Figure A.5.3
Dependency Ratios (projected)



Source: Health Surveillance, 1998